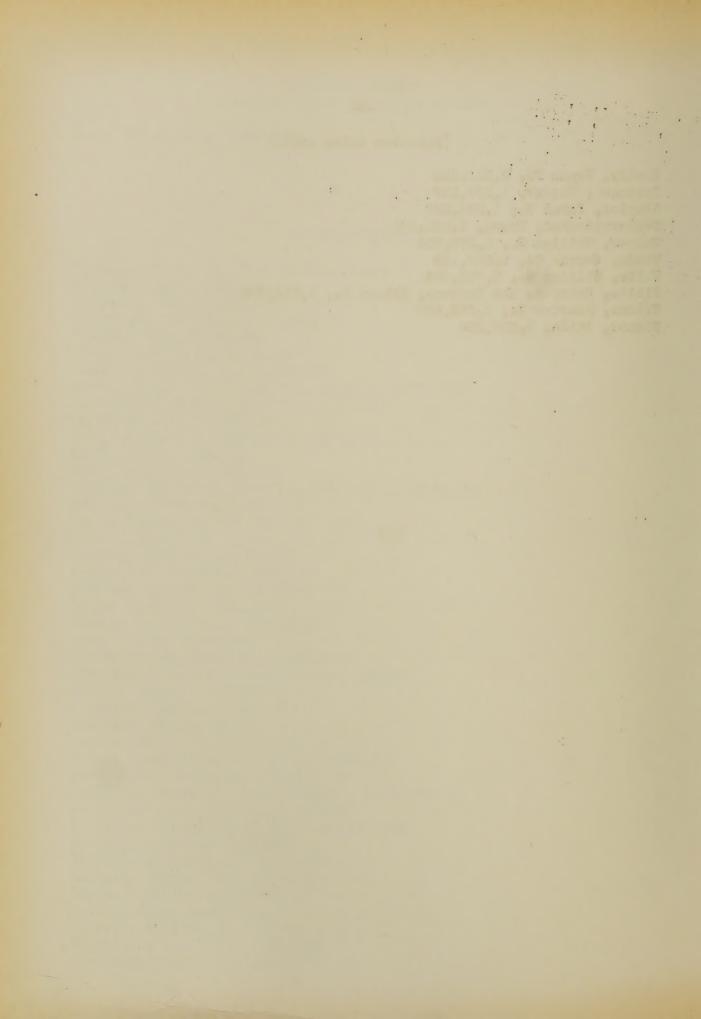
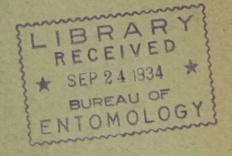
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UNITED STATES DEPARTMENT OF AGRICULTURE BUREAU OF CHEMISTRY AND SOILS INSECTICIDE DIVISION

Patent List No. 15



A LIST OF UNITED STATES PATENTS

Issued from 1917 to 1933 inclusive

relating to

COMPRESSIBLE INSECT POWDER DUSTERS

Compiled by

R. C. Roark

and in the second

A LIST OF UNITED STATES PATENTS ISSUED FROM 1917 TO 1933, INCLUSIVE, RELATING TO COMPRESSIBLE INSECT POWDER DUSTERS.

Compiled by

R. C. Roark

Insecticide Division, Bureau of Chemistry and Soils.

The 26 devices are designed to expel powdered sulphur, pyrethrum powder, or other insecticidal dust by compressing the sides of the container. Six devices are intended for applying powdered insecticides to plants and animals, the others are adapted for household use in combating roaches, etc.

Every effort has been made by the compiler to make this list of patents complete and no discrimination is intended against any patent mention of which is inadvertently omitted.

The Department of Agriculture assumes no responsibility for the merits or workableness of any of the patents, nor does it recommend any of the inventions listed.

- 1,254,968 (Jan. 29, 1918; appl. Sept. 19, 1916). SULPHUR SPRAY APPARATUS. Giuseppe Bianchin, Treviso, Italy. This apparatus distributes pulverized sulphur upon vines by a current of air from a bellows.
- 1,276,204 (Aug. 20, 1918; appl. Oct. 20, 1917). POWDER PACKAGE. Emil Frank, Cincinnati, Ohio. This triangular cardboard package with nozzle ejects insect powder when squeezed.
- 1,282,209 (Oct. 22, 1918; appl. June 27, 1918). POWDER PACKAGE. Emil Frank, Cincinnati, Ohio. This triangular cardboard package with nozzle ejects insect powder when squeezed. It is an improvement upon the device described in United States Patent 1,276,204 granted August 20, 1918 to E. Frank.
- B. Bird, Chicago, Ill. This rubber bulb compresses and projects air into a container for ejecting pulverized material such as a disinfectant.
- 1,366,279 (Jan. 18, 1921; appl. Aug. 7, 1919). POWDER DISPENSING RECEPTACLE. Perry J. D. Reynolds, Pontiac, Mich. This cylindrical container for powder is made of flexible material such as leather with metal guards normally held apart by a spring. The contents are expelled through an opening in the head when the ends are moved toward each other.
- 1,369,215 (Feb. 22, 1921; appl. Jan. 27, 1919). INSECT FOWDER GUN. Edward S. Baston, Georgetown, Ky. This device consists of a bellows or a gun adapted to be used for applying powdered insecticides to plants. Means are provided for agitating the powder within the body of the bellows.
- 1,370,110 (Mar. 1, 1921; appl. Dec. 22, 1919). INSECTICIDE-DIS-PENSING RECEPTACLE. Herbert G. Irwin, Floydada, Tex. This insecticide-dispensing receptacle may be pressed between the fingers for discharging the insecticide on to plants, animals, or any articles which have been attacked by insects.
- 1,371,017 (Mar. 8, 1921; appl. Sept. 13, 1920). POWDER-CONTAINER. John D. Boyle, New Rochelle, N.Y. Insect powder may be expelled from this conical container by compressing the walls.
- 1,371,356 (Mar. 15, 1921; appl. Oct. 1, 1920). POWDER DISPENSING BOX. Harry L. Dunnett, Kansas City, Mo. Regal Manufacturing Co., Kansas City, Mo. This insect powder box has a flexible top and bottom with an expansion spring between them and thus acts as a bellows to expel the powder.

- 1,377,077 (May 3, 1921; appl. Dec. 22, 1919). INSECTICIDE HOLDER. Herbert G. Irwin, Floydada, Tex. This cylindrical container for powdered insecticide has a spout and a bellows arrangement for expelling the contents.
- 1,377,113 (May 3, 1921; appl. Dec. 13, 1920). POWDER CONTAINER. John D. Boyle, New Rochelle, N.Y. Insect powder is expelled from this pyramidal container by squeezing the sides.
- 1,388,293 (Aug. 23, 1921; appl. Oct. 10, 1919). BELLOWS BOX. Frank J. Novotney, Kansas City, Mo. This flat circular box ejects powder through a pin hole in the side by pressure applied to the top and bottom.
- 1,438,487 (Dec. 12, 1922; appl. Feb. 16, 1921). CONTAINER. John Greene, New York, N.Y. Gilpin, Langdon and Co., Inc. This triangular cardboard box acts as a bellows when squeezed and distributes insect powder into crevices or elsewhere.
- 1,451,138 (Apr. 10, 1923; appl. July 26, 1922). INSECT POWDER GUN. Samuel Bernstein, New York, N.Y. This insect powder gun consists of a powder-containing body with a nozzle at one end and a bellows bulb at the other.
- 1,459,784 (June 26, 1923; appl. Dec. 28, 1921). POWDER DISPENSING BOX. Joseph Loufek, Keokuk, Iowa. Iowa Can Co., Keokuk, Iowa. This flat circular pasteboard bellows box expels powdered insecticide through a small hole in the side when compressed.
- 1,486,978 (Mar. 18, 1924; appl. Feb. 21, 1922). POWDER DISPENSING BOX. James V. Lobell, Newark, N.J. This bellows type powder dispensing box is made of metal and is provided with a nozzle.
- 1,490,496 (Apr. 15, 1924; appl. Dec. 7, 1921). RESILIENT RE-CEPTACLE ADAPTED TO EJECT ITS CONTENTS WHEN COMPRESSED. William J. Trevillian, Freeport, Ill. This device consists of a shallow cylindrical box which ejects powdered insecticide through a small opening when compressed.
- 1,500,514 (July 8, 1924; appl. Mar. 30, 1921). INSECTICIDE CONTAINER AND DISTRIBUTOR. Abb L. Milligan, Atlanta, Ga. An insecticide container and distributor consists of inner and outer telescoping sections and is adapted to eject the insecticide without transferring from the original container.

- 1,507,399 (Sept. 2, 1924; appl. Apr. 18, 1923). PUFFER PACKAGE FOR INSECT POWDER. Hugh P. McCormick, Baltimore, Md. McCormick & Co., Inc., Baltimore, Md. This triangular shallow box may be made of sheet metal or other suitable material and is designed for containing insect powder which is to be sprayed from the package by pressure thereon.
- 1,521,496 (Dec. 30, 1924; appl. Mar. 10, 1922). POWDER DUSTER. James L. Wolleson, Chicago, Ill. This device consists of a shallow pasteboard box provided with a spring whereby the box may be used as a bellows for forcing powdered material therefrom.
- 1,661,092 (Feb. 28, 1928; appl. June 9, 1927). APPARATUS FOR DISTRIBUTING INSECTICIDES. James M. Robbins, Camden Point, Mo. Anna Robbins, Camden Point, Mo. A bellows for distributing powdered insecticide is described.
- 1,729,490 (Sept. 24, 1929; appl. Dec. 10, 1925). INSECT POWDER DISTRIBUTOR. Albert J. Roh, Jr., Mobile, Ala. This insect powder distributor includes a flexible air chest and powder receptacles secured to the ends and communicating with the air chest and provided with discharge ports, the device being adapted to be used to distribute the powder in one receptacle first and thereafter to distribute the powder in the other receptacle, and adapted to be operated by alternately moving the receptacles toward and away from each other.
- 1,912,384 (June 6, 1933; appl. Nov. 25, 1930). DISPENSING CONTAINER. Paul D. Peterson, Ligonier, Pa. The Koppers Co., Delaware. A dust dispensing container comprises two rectangular cardboard boxes of substantially equal size movably connected by a hinge and a paper bellows with a single inwardly extending fold on each side. The device is useful for applying powdered insecticides (sulphur, etc.) to plants and animals.
- 1,912,385 (June 6, 1933; appl. Nov. 4, 1931). DISPENSING CONTAINER. Paul D. Peterson, Ligonier, Pa. Koppers Company, Delaware. Improvements in the insecticide dispenser described in United States Patent 1,912,384 are described.
- 1,924,013 (Aug. 22, 1933; appl. Oct. 6, 1932). POWDER SPRAYER. James Anderson, Ashland City, Tenn. Powdered insecticide in a box is forced through a nozzle by compressing the box. The device is designed to be supported at the waist of a person.
- 1,936,879 (Nov. 28, 1933; appl. Apr. 23, 1932). DISPENSING CON-TAINER. Paul D. Peterson, Ligonier, Pa. - The Koppers Company, Delaware. -Improvements in the insecticide dispensers of United States Patents 1,912,384 and 1,912,385 are described.

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Gilpin, Langdon & Co., Inc., 1,438,487 Iowa Can Co., 1,459,784 Koppers Co., 1,912,384; 1,912,385; 1,936,879 McCormick & Co., 1,507,399 Regal Manufacturing Co., 1,371,356 Robbins, Anna, 1,661,092

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